NATIONAL SECURITY AGENCY
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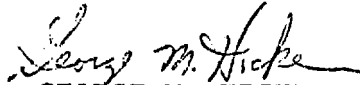
MEMORANDUM FOR THE COINS SUB-SYSTEM MANAGERS

SUBJECT: Draft COINS Operating Procedure on Data
Standards in the COINS Experiment.

1. References

   a. COINS Committee Report, dated 25 May 1966,
   Subject: "COINS Implementation Plan". (Note
   specifically pages 7 and 8 as well as pages 10
   and 11).

   b. CODIB-D-113.4/6, "COINS Committee Semi-
   Annual Report", 30 September 1967. (Note
   specifically page 8 paragraph b).

2. Attached is a first draft of a proposed COINS
Operating Procedure setting forth the procedures by which
data standards, or some degree of commonality of data
can be achieved in the COINS Experiment. Request your
comments by 20 January 1969. Your attention is invited
to previous statements and recommendations in this area
noted in the aforementioned references.

3. I believe that some degree of data standardization
is desirable in the COINS Experiment. In fact, I am
forwarding under separate cover some recommendations on
areas which require immediate attention. The intent
of this Operating Procedure is to formalize these
procedures for the future.

GEORGE M. HICKEN
COINS Project Manager

Incl:
  a/s

cc:
  NIPE

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Excluded from automatic
downgrading and
declassification

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2 January 1969

COINS Operational Procedures

Number 2 1968

Data Standards Within COINS
(First Draft)

I

References

1. Bureau of the Budget Circular No. A-86, Subject: "Standardization of Data Elements and Codes in Data System" dated September 30, 1967.

2. Department of Defense Instruction Number 5000.11, Subject: "Data Elements and Data Codes Standardization Program" dtd December 7, 1964.

3. Department of Defense Instruction Number 5000.12, Subject: "Data Elements and Codes Standardization Procedures" dtd 27 April 1965.

4. Defense Intelligence Agency Instruction No. 65-9, Subject: "Data Element and Data Codes Standardization Program" dtd 24 February 1966.

5. NSA Regulation No. 89, Subject: "Standardization Program for Data Elements and Data Codes, 1 July 1966.

II

Authority

1. USIB-D-39.1/9, "Community On-line Intelligence System", 11 April 1968.

2. USIB-D-71.4/1, "Management of the COINS Experiment", 3 June 1968, paragraph 4k, page 3.

3. COINS Master Plan, Part V (FY 1969-1970) dated 2 December 1968. (Reference Part III, paragraph 3d).

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III

Purpose

The purpose of this paper is to provide the COINS

Program with:

1. A common set of terms and definitions with respect to data in COINS.

2. A mechanism for:

(a) Developing and implementing data standards for use in the COINS Experiment.

(b) Achieving some degree of commonality in the data elements in selected files when data standards cannot be achieved (e.g., translation tables)

(c) Implementing, in an orderly fashion, those data standards promulgated by a common higher authority (i.e., Bureau of the Budget or USIB).

(d) Proposing data standards for use in the COINS Experiment to the IHC for consideration as USIB standards.

(e) Establishing the procedures for eliminating the use of codes and seldom used abbreviations in answers as well as interrogations.

IV

Scope

1. General: It is recognized that it may not always be possible to standardize a given data element throughout the COINS files in all agencies. Therefore procedures

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have been included which permit ad hoc arrangements whereby some degree of data commonality can be achieved within a file or set of related files (e.g., order of battle files) through the use of translation tables, etc.

2. <u>COINS Data Standard</u>: A COINS data standard exists when it is used in all files in the COINS Experiment where required regardless of the participating agency actually sponsoring the files. There are three sources of data standards for the COINS Experiment:

(1) First, national data standards developed and promulgated by the Bureau of the Budget which are applicable to <u>all</u> government organizations. (See Reference 1). No such data standards currently exist although they are working on geo-political codes, business and government organization codes, and time codes.

(2) Second, data standards developed and promulgated by USIB or one of it's committees (e.g., IHC, COMIREX, etc.) which are applicable to all member organizations.

(3) Third, data standards approved for use in the COINS Experiment in accordance with procedures outlined in Section VII providing they are not in conflict with a standard promulgated by higher authority or a standard adopted and promulgated by one or more of the participating agencies. Proposals for the adoption of a given data standard for the COINS Experiment can come from:

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(a) any of the COINS participants

(b) any of the COINS Panels

(c) the COINS Manager and Sub-System

Managers can mutually agree upon a given data standard

for a given data element.

3. Ad Hoc Agreements: An ad hoc agreement between

two or more organizations participating in COINS intended

to achieve some degree of commonality in the data elements

used in their files is not to be regarded as COINS

data standards. ᶜ³ These arrangements are not universally

accepted for use in other files in the COINS Experiment

where required. These efforts may eventually lead to the

development of a COINS data standards. These ad hoc

arrangements: (1) can be implemented at a time specified

by the participating organizations involved and (2) must

be coordinated in a Technical Memorandum of Agreement (TMA).

V

Constraints

1. Data Standards and Conventions developed as a

result of this Operating Procedure:

a. Are applicable only for files in the COINS

Experiment

b. Are not to be regarded as USIB standards or

standards for general use throughout the intelligence

community.

c. Do not necessarily apply to the non-COINS

files of a participating Agency (i.e., a participating

organization's files which are not in COINS).

2. This Operating Procedure does not supersede current regulations or directives. This Operating Procedure is intended to establish procedures by which some degree of data standardization or commonality can be achieved by those organizations participating in the COINS Experiment while still conforming to current regulations or directives.

VI

Definition of Terms

1. _Purpose_: This glossary of terms and abbreviations has been specially compiled for the purposes of:

(a) Explaining terms used in this paper and throughout the COINS Experiment.

(b) Insuring that unique, unambiguoug meanings are assigned to each term used in the COINS program.

(c) Identifying and promoting use of preferred terms and discouraging the use of synonyms which may lead to confusion.

2. _Terms and Definitions_: Following are terms and then definitions which are used in data standardization many of which are also defined in other publications (e.g., see References 1, 2, 4 and 5).

a. Data Element: A basic unit of information having a unique meaning and which has sub-categories (data items) of distinct nnits or values. This should not be referred to as a field name.

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b.	Data Item:	A sub-unit of descriptive information or value classified under a data element.
c.	Data Use Identifier:	The name given to the use of a data element in a data system or file.
d.	Data Code:	A number, letter, character or any combination thereof used to represent a data element, data item or data use identifier. This should not be referred to as a brevity code.
e.	Data Chain:	Two or more Data Elements chained to each other and used as a group.
f.	Standard Data Feature:	A data element, item, code use identifier, or chain, or a combination thereof, ___ used with but one meaning and is not duplicated in any other systems.
g.	Data System:	A combination of human effort, forms, formats, procedures, data elements and codes, communication facilities and automatic data processing equipment, which

provides an organized and
interconnected means (automatic
or manual) for recording, collect-
int, processing and communicating
data.

VII

Approach

There is an urgent requirement to develop and adopt
some data standards or commonality for use in the COINS
Experiment. Therefore any combination, of the following
approaches can be used in providing some form of an
agreement   by the Sub-System Managers of
the participating organizations.

1. COINS Data Standards can be achieved by:

   a. Adopting data standards already developed and
used by one of the participating Agencies (Note: This
approach is useful when one organization has a data standard
and the other participating agencies do not have a standard).

   b. Developing a new data standard for use in the
COINS Experiment. (Note: This approach can be used when
none of the participating organizations are committed to
an internal data standard.)

2. Commonality of Data can be achieved by agreement
between two or more Agencies but they can also be achieved
by:

   a. Developing a translation table for those cases
where there is a one-to-one-relationship in the data items

and no common data standard can be agreed upon. (Note: This approach is useful when a short, finite number of terms are involved and when two or more of the participating organizations are committed to using different internal data standards).

b. Developing a set of common terms for use in interrogations and answers even though the data items stored in each Agency's file may be different.

VIII

Procedures for Developing a COINS Data Standard

1. **Recommendations:** The COINS Project Manager or the Sub-System Managers for any participaing organization is authorized, and in fact encouraged, to recommend data elements for consideration as data standards for use in all COINS files where appropriate.

2. **Form:** The following format will be used to recommend a data element for use as a standard within COINS.

   a. Name of Organization submitting recommendation

   b. Complete name of Data Element

   c. Clear, precise definition of the data element

   d. Data Element Code

   e. Data Items - This will contain

   (1) a limited list of data items to be used, e.g., military ranks

   (2) a reference to the source from which the data items are derived, e.g., BE numbers.

   (3) the recording conventions for entering

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the data items in a field when it is not possible to either (a) provide a limited list of data items or (b) identify the source of the data items. (e.g., Surname).

    (4) definitions and codings of data items.

    f. Identify COINS files and fields within each file that might be affected if this standard is adopted.

    3. Coordination

    a. Recommendations will be submitted to the COINS Managers for coordination.

    b. The COINS Manager will distribute copies of each proposed data standard to the sub-system manager of the participating organizations for coordination and concurrence.

    c. Sub-system managers from each of the participating organizations will coordinate the proposed standard data element with the appropriate organizations within their respective agency and report such to the COINS Manager within 30 days indicating that the proposed standard data element is:

    (1) acceptable and will be implemented immediately upon final approval by all other participating organizations (e.g., simple conversion).

    (2) acceptable but can not be implemented for some specified period of lead time required e.g., 90 to 180 days, etc.

    (3) not acceptable because .... (insert appropriate reason)..

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4. Results

   a. Proposed standard data elements which are approved by the sub-system managers will be:

     (1) Promulgated by the COINS Manager for use in those COINS files where it is appropriate

     (2) Forwarded to Intelligence Information Handling Committee (IHC) for consideration as a data element standard within the USIB Community.

   b. Proposed data element standards which are not approved for use in COINS will be submitted to the IHC for resolution along with appropriate documentation indicating why the proposed standard data element was not acceptable.

5. Implementation Schedules

   Data Standards promulgated by higher authority (i.e., BOB or USIB) or adopted by the COINS participants will be implemented at a common time selected by the COINS manager in consultation with the sub-system managers.

IX

Procedure for the General Elimination of Codes

and Seldom Used Abbreviations

1. General Objective: The objective of this procedure is to simplify for the user the remote interrogation procedures and interpretation of information contained in answers to such interrogations. Specifically it establishes the goal and procedures for eliminating the need for users

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to use codes and seldom used abbreviations in (a) framing

interrogation or (b) interpreting answers to interrogations.

    2. <u>Principle</u>: This procedure is based on the principle

that the data item used in an interrogation or an answer

can be different than that which is actually stored in the

file, (see table 1 for examples).

    3. <u>Approach</u>:

    a. Seldom used abbreviations and codes can

be used to store data items in a file but they will

be translated into complete, acceptable meaningful

terms when printed out in an answer to an interrogation.

    b. When entering an interrogation the user

should have the option of using either:

    (1 (seldom used abbreviations or meaningless

codes when known or

    (2) complete, meaningful terms or acceptable

synonyms.

    c. The following table illustrates the procedure

outlined above.

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TABLE I

DATA ITEMS	DATA ITEMS FOR STORAGE		ACCEPTABLE TERMS TO BE USED IN INTERROGATIONS OR ANSWERS		
	I	II	I	II	III
SUNDAY	1	A	SU	SUN	SUNDAY
MONDAY	2	B	MO	MON	MONDAY
TUESDAY	3	C	TU	TUE	TUESDAY
WEDNESDAY	4	D	WE	WED	WEDNESDAY
THURSDAY	5	E	TH	THU	THURSDAY
FRIDAY	6	F	FR	FRI	FRIDAY
SATURDAY	7	G	SA	SAT	SATURDAY

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4. Procedures: The same procedures outlined in

Section VIII will be used to submit proposals for data

standards will also be used to submit proposals to eliminate

the use of codes and abbreviations in interrogations and

answers.

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